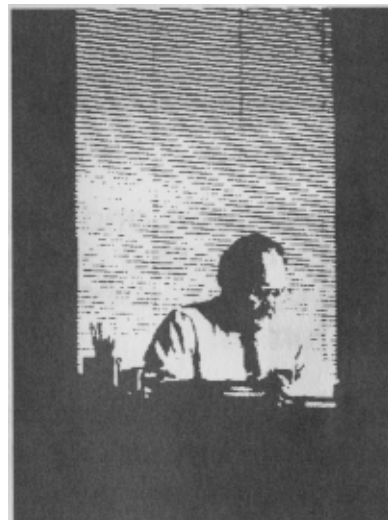


Occupational

Lead Exposure

An Employer Alert



- Occupational lead poisoning is a preventable disease.
- Employers are responsible for maintaining a safe workplace in accordance with the Lead Standard.
- Consultation services and technical assistance are available to help employers prevent lead overexposure in their employees.

Many workers and working owners of lead-using companies are being overexposed to lead dust and fumes.

Lead enters the body when air contaminated with lead fumes or fine lead dust is inhaled. This can happen if proper ventilation systems are lacking, or if respirators aren't used properly.

Lead dust also can be taken into the body through the mouth. This is likely to happen if workers eat, drink or smoke in areas with lead dust, or if they don't wash their hands carefully before putting something they have touched into their mouths.

Lead dust from work also may be taken home on hair, clothing and shoes, where it can poison other people in the household. Pregnant women and young children are especially at risk. In children, lead can cause behavioral problems and slow mental development. These problems may be lifelong.

Symptoms of lead poisoning may not be noticed right away, even though lead is building up in the body.

Over time, lead can damage the brain, blood, nerves, kidneys and reproductive organs. Lead-poisoned workers can have permanent disability—memory loss, extreme fatigue, emotional problems, even kidney failure or death.

INFORMATION



State of Washington
Department of
Labor and Industries

Lead threatens the health of business, too.

The cost of lead poisoning can be huge: medical bills, workers' compensation claims, lost work time, poor morale and low productivity. A business with serious WISHA violations may be subject to fines.

Many companies are unaware of the existing requirements of the Lead Standard and what they can do to comply with the law and protect their workers from lead poisoning.

What is the Lead Standard?

The Lead Standard is a federal and state regulation (WAC 296-62-07521) that requires employers to follow specific guidelines to protect their employees from harmful lead exposure. (Construction work is governed by WAC 296-155-176).

Employers must ensure that workplace air concentrations of lead do not exceed $50 \mu\text{g}/\text{m}^3$, averaged over an eight-hour period.

Blood lead testing at regular intervals is required for all employees who work in areas with $30 \mu\text{g}/\text{m}^3$ or more of airborne lead. Studies have shown that most radiator repair shops without special ventilation systems, for example, have airborne lead levels above this range.

Depending on the blood-lead level, an employee must be retested at specific intervals:

Most Recent Blood Lead Level ($\mu\text{g}/\text{dl}$)	Blood Testing Required by Lead Standard
None	Immediately
0-39	Every 6 months
40-59	Every 2 months
60 or above	Every month
Worker on lead-related medical removal for any reason	Every month

If testing shows that an employee has a blood-lead level above $40 \mu\text{g}/\text{dl}$, the company has a serious lead problem. Employers must reduce the lead dust and fumes in the workplace and, if the employee works at a construction site, provide adequate respiratory protection. Respirator use must be accompanied by proper fitting, training, cleaning and storage. Other required measures include safety training and complete medical evaluations of employees.

What else does it require?

- An employee must be removed from lead exposure if a blood lead test is $60 \mu\text{g}/\text{dl}$ or above, or if an average of the last 3 tests are $50 \mu\text{g}/\text{dl}$ or above. This means that the employee must either be sent home or reassigned to work in a lead-free area until the levels come down. ***During this period, the employee must continue to receive full salary and benefits and maintain seniority. If a workers' compensation claim is filed, the employer must make up the difference between the time loss payments and the usual income.***
- Employees may also be removed from lead exposure by a physician if they have a medical condition that could be worsened by exposure to lead. Employees are protected against loss of earnings, seniority or other employment benefits for 18 months during medical removal. ***The employer must pay earning protection even if there is no other job available for the employee.***
- If an employee's blood lead level is $40 \mu\text{g}/\text{dl}$ or above, employers must provide at least one medical evaluation each year (including a fertility test in men or pregnancy test in women if the employee requests it) and blood lead tests every 1-2 months, ***at no cost to the employee.***
- Medical evaluations must be performed as soon as possible if an employee develops signs or symptoms commonly associated with lead poisoning. ***It is the employer's responsibility to make sure that the medical evaluations are performed.***

As an employer, what can I do to prevent lead poisoning?



1 Reduce airborne lead by installing good fume and dust collecting systems, and check them often to make sure that they are working properly. For copies of published information on principles and designs of ventilation systems, contact SHARP (360) 902-5669.

- Business and trade associations can also give advice on current state-of-the-art ventilation systems and equipment for specific industries. For example, NARSA (National Automotive Radiator Service Association) publishes a pamphlet for radiator repair shops entitled "Getting the Lead Out."
- Professional ventilating contractors, equipment sources and private industrial hygiene consultants are listed in the Yellow Pages of your phone book.

2 Clean up lead dust and keep all surfaces as lead-free as possible. Do not use compressed air or dry sweeping to remove lead dust. Use a vacuum with a high-efficiency (HEPA) filter or a wet cleaning method.

3 Keep workers from bringing food, drinks and tobacco into high-lead areas. Set up a lunchroom that is separated from work areas. Provide protective work clothing free of charge and make sure workers change clothes before going into the lunchroom or leaving work.

4 Make sure that workers wash up before eating, drinking, smoking or applying make up.

5 Make sure your workers receive training about the health hazards of working with lead.

6 Respirators are a way to protect workers from high levels of airborne lead until levels can be permanently reduced. Except for certain very high exposure jobs, they are only a temporary solution.

Others Who Can Help

Washington State Department of Labor & Industries (L&I) Consultation and Compliance Services

L&I enforces the Lead Standard. These are rules for employers on using lead safely and ensuring that workers are protected from the harmful effects of lead. L&I's Consultation program provide free assistance upon request to enable employers to conform to lead safety standards. Consultation is confidential and without penalty.
(360) 902-5500

L&I's SHARP Program

The Safety & Health Assessment & Research for Prevention Program (SHARP) performs research and analysis of workplace health, safety and ergonomic issues. SHARP maintains the Occupational Lead Exposure Registry and can provide further information to interested employers on work-related lead poisoning and methods of prevention.
(360) 902-5669

University of Washington

The Dept. of Environmental Health of the University of Washington provides on-site consultation services through its Field Research and Consultation Group. Free assistance is available upon written request from employers. Appointments can be made by writing to the University of Washington, Field Research & Consultation Group, 4540 Union Bay Place N.E., Seattle, WA 98105.
(206) 543-9711

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If you require special communication or accommodation needs, please contact Department of Labor and Industries, Safety & Health Assessment & Research for Prevention Program at (360) 902-5669